III. AMENDMENTS TO THE SPECIFICATION:

On page 1, par. 0005, starting at line 27, please amend as follows:

To use such a circuit in automotive applications to produce a dc voltage different [[to]] from the input voltage requires that the circuit be rugged and in particular independent of supply voltage, process variation and temperature.

On page 4, par. 0012, starting at line 8, please amend as follows:

The current source of the reference ramp circuit is preferably a fixed current constant current source and the current source of the modulation ramp circuit is preferably a modulated current source having a control input for controlling the output current and hence for controlling the percentage of time the output is on.

On page 4, par. 0019, starting at line 21, please amend as follows:

Preferably, the signal generator and at least one power transistor [[is]] are included in the same device package.

On page 6, par. 0031, starting at line 20, please amend as follows:

The charge rate of the capacitor 10 in the modulation ramp circuit 6 is controlled by current source 32. As the circuits are matched if the current output by current source 32 in the modulation ramp circuit is greater than the current output by current source 8 in the reference ramp circuit then the modulation detector 18 in the modulation ramp circuit will trigger to produce an output before the voltage detector 18 in the reference ramp circuit. When the reference voltage detector triggers it discharges the capacitor 10 in the modulation ramp circuit

and accordingly resets the voltage detector 18 in the modulation ramp circuit and [[return]] returns the sign of the output to its original sign.

On page 6, par. 0032, starting at line 29, please amend as follows:

The output of the modulation ramp circuit 18 functions as the output of the signal generator. The [[percentage of]] pulse rate modulation, as a percentage, is a ratio of ~~given by the amount that the current output by the modulation current source 32 increases that of~~ the reference current source 8 to the current output by the modulation current source 32. Thus, if both currents are equal, 100% [[on]] of pulse width modulation signal will be output. Similarly, if [[If]] the modulation current source 32 produces twice as much current as the reference current source 8, then 50% [[on]] of pulse width modulation will be achieved. An illustrative example ~~This is illustrated~~ is shown in FIG. 2 for a 2.5 times ratio producing a 40% on output.

On page 7, par. 0034, starting at line 21, please amend as follows:

The self cancelling design of the circuit also means that it has a high degree of temperature independence. Any change in the current source, the capacitor or the voltage level detected in the voltage detector, due to a change in a [[components]] component's characteristics, will be matched in the other circuit and cancelled out, even if the temperature rapidly changes. Therefore the PWM on-ratio will stay more constant compared with existing circuits. This is highly important in power IC's, which have a wide operating temperature range.

On page 7, par. 0035, starting at line 28, please amend as follows:

A further advantage of this circuit is that it is open loop and as such does not require an op-amp in its design. This offers a number of advantages. Firstly it greatly simplifies the design and operation of the circuit as the performance of the PWM circuit is not limited by the performance of the op-amp. This means that offsets and slew rates which could reduce the performance of an existing PWM design do not have to be considered. This is especially important in this case, where the PWM system has a very high frequency and to get a good level of accuracy the slew rate on the output [[ill]] will have to be very high, which can make designing a suitable op-amp difficult.

On page 9, par. 0044, starting at line 13, please amend as follows:

High 60 and low 62 output voltage terminals are connected to filter node 58 and to low voltage input node 42 respectively. Feedback link 64 is used to feed back to control the current output [[by]] from the modulation current source. The details of how the modulation current signal is controlled from the signal on the feedback link 64 and the input control node 44 are well known to the person skilled in the art and so will not be described further.